



0212.67006

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Marc V. Marini
Serial No.: 10/760,110
Conf. No.: 7346
Filed: 1/16/2004
For: TOOL-LESS BLADE CLAMPING
APPARATUS FOR A RECIPROCATING
TOOL

Art Unit: 3722
Examiner: Talbot, Michael

I hereby certify that this paper is being deposited with the United States Postal Service as FIRST-CLASS mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this date.

5/2/07
Date *Registration No. 26674*
F-CLASS.WCM
Appr. February 20, 1998 Attorney for Applicant(s)

TRANSMITTAL OF APPEAL BRIEF

MS Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on March 5, 2007.

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) \$500.00

(complete (a) or (b) as applicable)

() (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d) for the total number of months checked below:

Extension fee for response within first month:

() By a small entity (1.9(f))..... \$ 60.00
() By other than a small entity \$ 120.00

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() By a small entity (1.9(f))..... \$ 225.00
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() By a small entity (1.9(f))..... \$ 510.00
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() By a small entity (1.9(f))..... \$ 795.00
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() The extension fee has already been filed in this application.


() A check in the amount of \$ _____ for the extension of time fee is enclosed.

(X) (b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

(X) A check in the amount of \$500.00 is enclosed for filing the Appeal Brief.

(X) The Commissioner is hereby authorized to charge any additional fee which may be required, or credit any overpayment to Deposit Account No. 07-2069. Should no proper payment be enclosed, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 07-2069. (One additional copy of this Notice is enclosed herewith.)

Dated: May 2, 2007



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5/2/07 *[Signature]*
Date Registration No. *2617K*

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Appr. February 20, 1998

Attorney for Applicant(s)

APPELLANT'S BRIEF ON APPEAL PURSUANT TO 37 CFR § 41.37

This Appeal Brief is in support of Applicant's Notice of Appeal dated
March 5, 2007.

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REAL PARTY IN INTEREST

Credo Technology Corporation.

RELATED APPEALS AND INTERFERENCES

None.

STATUS OF CLAIMS

The status of the claims currently is that claims 1-4 are rejected and claims 5-14 are allowed.

Claim 4 was stated by the examiner to be generic; therefore, if that claim is allowed, then dependent claims 15-25 should be entitled to consideration.

STATUS OF AMENDMENTS AFTER FINAL

An amendment after final to claim 1 that consisted of deleting "operable" and replacing it with --configured-- at line 13 thereof was entered for purposes of appeal.

SUMMARY OF CLAIMED SUBJECT MATTER

The present invention generally concerns tool-less blade clamping apparatus for power tools, such as reciprocating hand tools.

The rejected independent claims 1 and 4 are annotated with references to the first embodiment described in the specification and shown in Figs. 1-10 of the drawings, as follows:

1. A tool-less blade clamping apparatus (10, Figs. 1-10) for a reciprocating tool of the type which has a reciprocating plunger (12, Figs. 1, 2, 4, Pg 5/15-20) with at least one radially oriented aperture (54, Fig. 2, Pg 7/8-10) and a blade receiving slot (18, Fig. 2, Pg 6/13-20) at its forward end for receiving a blade (14, Fig. 1, 4, 5, Pg 6/21-27) of the type which has a shank portion (20) with a hole (28, Fig. 1, 4, 5, Pg 6/21-27) and at least one outwardly extending shoulder (22, Fig. 1, 5, Pg 6/21-27) between the distal end of the shank and a blade portion, the shank being configured to be inserted in the slot (18), the apparatus being configured to be attached to the plunger and having an opening (34, Figs. 1, 2, Pg 6/28-7/2) for receiving the blade shank therein and in the slot, said apparatus comprising:

said apparatus having an unclamped position and a clamped position wherein the shank portion (20, Fig. 5, Pg 6/19-27) of the blade can be inserted into said opening (34) when it is in said unclamped position and be securely retained therein when in said clamped position; (generally, Figs. 1-5, Pgs 5/27-6/12 and 8/13-9/11)

said apparatus being biased toward said clamped position; (spring 78, Pg 8/20-29)

said apparatus being configured to maintain its unclamped position when placed in said unclamped position; (Fig. 1, Pg 8/20-29; pin 52 held in transverse extension 50)

said apparatus being released when the at least one shoulder of the blade shank portion engages said apparatus as the shank portion is inserted into said opening and slot a predetermined distance to thereby place said apparatus in said clamped position; (Pg 8/30-9/7)

said apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly when said apparatus is moved to said unclamped position. (Pg 9/12-16)

4. A tool-less blade clamping apparatus (10, Figs. 1-10) for a reciprocating tool of the type which has a reciprocating plunger (12, Figs. 1, 2, 4, Pg 5/15-20) with at least one radially oriented aperture (54, Fig. 2, Pg 7/8-10) and a blade receiving slot (18, Fig. 2, Pg 6/13-20) at its forward end for receiving a blade (14, Fig. 1, 4, 5, Pg 6/21-27) of the type which has a shank portion (20) with a hole (28, Fig. 1, 4, 5, Pg 6/21-27) and at least one outwardly extending shoulder (22, Fig. 1, 5, Pg 6/21-27) between the distal end of the shank and a main portion, the shank being configured to be inserted in the slot, the apparatus being configured to be attached to the plunger and having an opening (34, Figs. 1, 2, Pg 6/28-7/2) for receiving the blade shank therein and in the slot, said apparatus comprising:

said apparatus having an unclamped position and a clamped position wherein the shank portion (20, Fig. 5, Pg 6/19-27) of the blade can be inserted into said opening when it is in said unclamped position and be securely retained therein when in said clamped position; (generally, Figs. 1-5, Pgs 5/27-6/12 and 8/13-9/11)

at least one (spring 78, Pg 8/20-29) biasing said apparatus toward said clamped position;

a releasable retaining mechanism for holding said apparatus in its unclamped position when placed in said unclamped position; (Fig. 1, Pg 8/20-29; pin 52 held in transverse extension 50)

said retaining mechanism being released when the at least one shoulder of the blade engages said apparatus as the blade shank portion is inserted into said opening and slot a predetermined distance to thereby place said clamping apparatus in said clamped position; (Pg 8/30-9/7)

said clamping apparatus engaging the at least one shoulder (22) and pushing the blade shank portion (20) outwardly therefrom when said retaining mechanism is moved to said unclamped position. (Pg 9/12-16)

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Whether the §102(e) rejection of claims 1-3 based upon Kramer et al. '548 patent should be reversed as being an improper rejection.

Whether the §103(a) rejection of claim 4 should be reversed as being an improper rejection based upon the combination of the Kramer et al. '548 patent and the Kakiuchi et al. '039 patent.

ARGUMENT

Claims 1-3 are Improperly Rejected Based Upon the Kramer '548 Patent

The examiner rejects claims 1-3 under 35 U.S.C. 103(e) as being anticipated by Kramer. Kramer clearly does not meet all of the elements of claim 1. First of all, claim 1 includes the recitation said apparatus being operable to maintain its unclamped position when placed in said unclamped position. Kramer does not do so as is established at column 5, line 54-61 where it states that in operation before a saw blade is inserted the cam collar 56 is normally in the engaged position due to the biasing action of the spring 54. To insert a saw blade 42, the collar housing 59 is engaged by the user and rotated to the released position thereby allowing the pin 50 to move out of the slot 62. The tang 48 of the saw blade is then inserted into the slot until the shoulder portions of the saw blade contacts the sleeve 58.

A review of the structure of the Kramer mechanism clearly indicates that there is no detent position and that would enable the apparatus to maintain its unclamped position and it does not operate in that manner. It also fails to anticipate, teach or suggest the element said apparatus being released when the at least one shoulder of the blade

shank portion engages said apparatus as the shank portion is inserted into said opening in a slot a predetermined distance to thereby place said apparatus in said clamped position.

If the examiner is contending that a releasable retaining mechanism is met by a user/operator physically holding the Kramer apparatus in its unclamped position, that is an absurd basis for maintaining the rejection.

The rejection is also truly remarkable in light of the recitation in claim 1 that “said apparatus being configured to maintain its unclamped position when placed in said unclamped position” is *admitted to be lacking in Kramer* by the examiner’s remarks directed to this very feature in the rejection of claim 4!

The examiner states in the advisory action that the use the phrase “being configured to” in the context of the claim language “said apparatus being configured to maintain its unclamped position when placed in said unclamped position” does not provide a positive limitation that results in a structural difference between the claimed invention and the prior art. Applicants dispute the examiner’s contention as lacking any legal basis inasmuch as no citation to MPEP or CFR sections are set forth, nor is there any citation of decisions from the CCPA or the CAFC. Moreover, a search of the USPTO website for the phrase “configured to” in claims identified 206,446 patents since 1975 that used this phrase.

In discussing analogous claim language in the context of a section 112 rejection, the CCPA decision of Patent Appeal No. 75-601, 530 F.2d 956 (CCPA 1976), the Court considered claim language “a pair of sleeves...each sleeve of said pair *adapted*

to be fitted over the insulating jacket of one of said cables.” *Id.* at 959. Also, “A similar situation exists with respect to the *adapted to be affixed* and *adapted to be positioned* limitations.” The Court stated “Again, a present structural configuration for the housing is defined in accordance with how the housing interrelates with the other structures in the completed assembly. *We see nothing wrong in defining the structures of the components of the completed connector assembly in terms of the interrelationship of the components, or the attributes they must possess, in the completed assembly.*” *Id.* at 959.

This claim element is certainly a positive limitation inasmuch as it directly recites that the apparatus has a configuration that results in it maintaining its unclamped position when it is placed in that unclamped position. The claim element recites structural configuration and functional operation that is clear and certainly positive. The examiner is attempting to totally ignore the element under the guise of it not being a positive limitation.

Kramer does not anticipate this element because it simply does not operate in this manner, which is specifically admitted by the examiner in the rejection of claim 4 under 35 U.S.C. 103(a). It is illogical and improper for the examiner to reject claims 1-3 as being anticipated by Kramer when it is admitted in the rejection of claim 4 that this very feature is absent. Reconsideration and allowance of claims 1-3 is respectfully requested.

Since the dependent claims 2 and 3 necessarily include the subject matter of claim 1 and in addition recite other features and/or functionality, these claims are also believed to be allowable.

**Claim 4 is Improperly Rejected Based Upon
the Combination of Kramer and Kakiuchi**

With regard to claim 4, the examiner attempts to combine Kramer and Kakiuchi to meet the element of a releasable retaining mechanism for holding said apparatus in its unclamped position when placed in said unclamped position. It is respectfully submitted that it is not possible to combine Kramer and Kakiuchi in any realistic manner to meet this element of the claim. It would be necessary to completely redesign the Kramer structure and it is not known how that would be done. While Kakiuchi has a pin 22 that rides in the axial slot portion 16b which holds it in an unclamped position and then has the pin 22 riding in the transverse slot 16a to move to its clamped position, that functionality cannot be implemented in the Kramer structure. For the pin 22 to axially move relative to the sleeve 11, the control member 20 which holds the pin 22 must ride in an indentation 2c. However, Kramer does not have such a pin 22 nor is it carried by a control member 20 that is biased by a spring 21.

The Kramer structure is an entirely different design and has *no axial movement of any of its components relative to the spindle 44*. All that happens is rotation of the blade clamp 41. The only axial movable component in the entire structure is the rear leg 90 which *deflects* between the dotted and solid position shown in Fig. 4. It is not

known how either one of these references would be modified to produce the desired action. It is submitted that the examiner is using hindsight and highly speculative reconstruction in an effort to combine these references, which is improper. For these reasons, reconsideration and allowance of claim 4 is also respectfully requested.


CONCLUSION

In addition, applicant respectfully requests allowance of claims 15-25 which depend from claim 4. These dependent claims necessarily incorporate the features of the claims from which they depend in addition to defining other features and/or functionality and also should be allowed.

For the above reasons, applicant requests the Board to reverse the outstanding rejections. The case should then be permitted to pass to issue.

Respectfully submitted,

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May 2, 2007

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CLAIMS - APPENDIX

1. A tool-less blade clamping apparatus for a reciprocating tool of the type which has a reciprocating plunger with at least one radially oriented aperture and a blade receiving slot at its forward end for receiving a blade of the type which has a shank portion with a hole and at least one outwardly extending shoulder between the distal end of the shank and a blade portion, the shank being configured to be inserted in the slot, the apparatus being configured to be attached to the plunger and having an opening for receiving the blade shank therein and in the slot, said apparatus comprising:

said apparatus having an unclamped position and a clamped position wherein the shank portion of the blade can be inserted into said opening when it is in said unclamped position and be securely retained therein when in said clamped position;

said apparatus being biased toward said clamped position;

said apparatus being configured to maintain its unclamped position when placed in said unclamped position;

said apparatus being released when the at least one shoulder of the blade shank portion engages said apparatus as the shank portion is inserted into said opening and slot a predetermined distance to thereby place said apparatus in said clamped position;

said apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly when said apparatus is moved to said unclamped position.

2. A clamping apparatus as defined in claim 1 further comprising at least one spring biasing said apparatus toward said clamped position.

3. A clamping apparatus as defined in claim 1 further comprising:

a releasable retaining mechanism for holding said apparatus in its unclamped position when placed in said unclamped position;

said retaining mechanism being released when the blade shank portion is inserted into said opening and slot a predetermined distance to thereby place said clamping apparatus in said clamped position;

said clamping apparatus pushing the blade shank portion outwardly therefrom when said retaining mechanism is moved to said unclamped position.

4. A tool-less blade clamping apparatus for a reciprocating tool of the type which has a reciprocating plunger with at least one radially oriented aperture and a blade receiving slot at its forward end for receiving a blade of the type which has a shank portion with a hole and at least one outwardly extending shoulder between the distal end of the shank and a main portion, the shank being configured to be inserted in the slot, the apparatus being configured to be attached to the plunger and having an opening for receiving the blade shank therein and in the slot, said apparatus comprising:

said apparatus having an unclamped position and a clamped position wherein the shank portion of the blade can be inserted into said opening when it is in said unclamped position and be securely retained therein when in said clamped position;

at least one spring biasing said apparatus toward said clamped position;

a releasable retaining mechanism for holding said apparatus in its unclamped position when placed in said unclamped position;

said retaining mechanism being released when the at least one shoulder of the blade engages said apparatus as the blade shank portion is inserted into said opening and slot a predetermined distance to thereby place said clamping apparatus in said clamped position;

said clamping apparatus engaging the at least one shoulder and pushing the blade shank portion outwardly therefrom when said retaining mechanism is moved to said unclamped position.

5-14 are allowed.

15. A clamping apparatus as defined in claim 4 wherein the plunger has a cylindrical end portion and said clamping apparatus further comprises:

a hollow generally cylindrical clamping collar configured to fit around the plunger

and be rotatable relative to the plunger, and having at least one axially oriented recess extending at least part of the length thereof and an inner cam surface that begins at the inside surface thereof and increases in radius through a first predetermined circumferential arc in a first direction;

a hollow generally cylindrical control sleeve configured to fit around said clamping collar, said control being rotatable and having an inwardly directed axial rib extending at least a portion of its length, said rib engaging said axial recess of said clamping collar to rotational lock said clamping collar and said control sleeve together, said control sleeve having a circumferentially extending elongated slot with a transverse axially extending slot extension;

a pin secured to the plunger and engaging said slot of said control sleeve and limiting rotational movement of said control sleeve between the ends of said circumferentially extending slot and axially between the ends of said transverse axially extending slot extension;

a torsion spring having one end restrained by the plunger and its opposite end retained by said control sleeve;

a compression spring effectively restrained by the plunger for biasing said control sleeve toward the forward direction;

a detente positioned in the plunger rod aperture and configured to engage the hole in the blade and thereby firmly hold the blade in said apparatus when urged into contact with the blade;

said control sleeve being biased by said torsion spring to rotate said clamping collar when the blade is inserted into the slot and said clamping collar and control sleeve said predetermined distance, whereby said control sleeve is released to rotate relative to said plunger, causing said clamping collar to rotate so that said cam surface engages said detente to move it into the hole in the blade and firmly hold the blade in the apparatus;

the blade being ejected when the control sleeve is manually rotated in the opposite direction to its position before it was released by insertion of the blade.

16. A clamping apparatus as defined in claim 15 further comprising a support

ring with an aperture therein positioned on the plunger end configured to contact the rear surface of said control sleeve and the forward end of said compression spring.

17. A clamping apparatus as defined in claim 16 wherein the plunger has a cylindrical end portion that has a reduced diameter relative to the plunger adjacent said end portion to thereby define a shoulder, said apparatus further comprising a spring retainer contacting the rear end of said compression spring, said spring retainer contacting the plunger shoulder which limits rearward movement of said spring retainer.

18. A clamping apparatus as defined in claim 15 wherein said control sleeve has a forward annular end wall with an opening therein that is slightly larger than the diameter of the plunger end portion, said end wall being configured to contact the at least one shoulder of the blade.

19. A clamping apparatus as defined in claim 15 wherein said torsion spring has an axially aligned front end leg and said clamping collar has an axially oriented aperture therein positioned to receive said front end leg for biasing said clamping collar in said first direction.

20. A clamping apparatus as defined in claim 4 wherein the plunger has a cylindrical end portion and said clamping apparatus further comprises:

a hollow generally cylindrical control sleeve configured to fit around the plunger, said control sleeve being axially movable relative to the plunger, said control sleeve having an elongated axially oriented aperture therein and an annular recess oriented in a plane perpendicular to the axis thereof and extending around a substantial portion of the outside surface near its front, said recess merging with a transverse axially oriented recess extending in the rearward direction;

a hollow generally cylindrical clamping collar configured to fit around said control sleeve and being rotatable relative to the plunger and control sleeve, said clamping collar having an inward protrusion configured to engage said annular recess and said transverse recess, said clamping collar having an elongated slot extending around at least part of the circumference thereof and an inner cam surface that begins at the inside surface thereof and increases in radius through a first predetermined circumferential arc in a first

direction;

a pin secured to the plunger and engaging said aperture of said control sleeve to permit axial movement thereof and prevent rotation thereof, said pin being positioned in said slot of said clamping collar to prevent axial movement and limit rotational movement thereof between the ends of said circumferentially extending slot;

a torsion spring having one end restrained by the plunger and its opposite end operatively connected to said control sleeve;

a compression spring effectively restrained by the plunger for biasing said control sleeve in the forward direction;

a detente positioned in the plunger aperture and configured to engage the hole in the blade and thereby firmly hold the blade in said apparatus when urged into contact with the blade;

said clamping collar being biased by said torsion spring to rotate said clamping collar when the blade is inserted into said clamping collar and control sleeve said predetermined distance, whereby said control sleeve is moved rearwardly until said protrusion moves from said transverse recess to said annular recess, which releases said clamping collar to rotate relative to said control sleeve and the plunger, causing said cam surface to engage said detente and move it into the hole in the blade and firmly hold the blade in the apparatus;

the blade being ejected when the clamping collar is manually rotated in the opposite direction to its position before it was released by insertion of the blade.

21. A clamping apparatus as defined in claim 20 wherein said transverse recess extends to the rear end of said control sleeve.

22. A clamping apparatus as defined in claim 20 wherein said annular recess is in a plane perpendicular to the axis of said control sleeve.

23. A clamping apparatus as defined in claim 20 wherein said first predetermined arc is within the range of about 50 degrees to about 90 degrees.

24. A clamping apparatus as defined in claim 20 further comprising a support ring with an aperture therein positioned on the plunger end portion configured to contact

the rear surface of said clamping collar, said support ring being coupled to said clamping collar so that they rotate together, said torsion spring having an axially oriented front end leg that is inserted into said support ring aperture.

25. A clamping apparatus as defined in claim 20 wherein the plunger has a cylindrical end portion that has a reduced diameter relative to the plunger adjacent said end portion to thereby define a shoulder, said apparatus further comprising a spring retainer contacting the rear end of said compression spring, said spring retainer contacting the plunger shoulder which limits rearward movement of said spring retainer, said compression spring biasing said control sleeve in the forward direction.

EVIDENCE - APPENDIX

None.

RELATED PROCEEDINGS- APPENDIX

None.